

AMENDMENTS TO THE SPECIFICATION

On page 15, please replace the paragraph that begins on line 4, and ends at line 19 with the following paragraph:

Hybridization Characteristics:

The hybridization characteristics of a probe are usually described by the melting point (T_m) of the probe-target hybrid. The melting point is therefore an important parameter used to guide the experimentation described above to determine the suitable hybridization conditions. However, when the assay is dependent on simultaneous hybridization of two probes each of these two probes must to be designed with similar hybridization characteristics such that the same hybridization conditions are suitable for both probes. The length of the nucleobase sequence provides a rough assessment of the hybridization characteristics, but can be refined by calculating the T_m using on-line calculators available at [www.applied biosystems.com](http://www.appliedbiosystems.com) ~~www.appliedbiosystems.com~~. The degree of similarity between the hybridization characteristics of Probe A and Probe B is dependent on both the stringency of the hybridization conditions and the desired degree of discrimination that needs to be achieved. Aided by no more than routine experimentation and the disclosure provided herein, those of skill in the art will easily be able to determine the degree of similarity required for performing assays utilizing the methods and compositions described herein.

On page 4, please replace the paragraph beginning at line 1 with the following paragraph:

The "Hybridization Probes" method (US 6,174,670) describes use of two DNA probes which hybridize to adjacent target sequences, where one DNA probe is labeled with a fluorophore (donor) and the other DNA probe is labeled with another fluorophore (acceptor), such that simultaneous hybridization of the two probes facilitate Fluorescence Resonance Energy Transfer (FRET). The method teaches that FRET occurs as the energy from the excitation of the donor

fluorophore is transferred to the donor fluorophore where it is emitted at the emission wavelength of the donor fluorophore. The combined specificity of the two probes is greater than that of either probe alone, as the detectable signal is dependent on the specific hybridization of two DNA probes. Use of Hybridization Probes is limited to selected donor-acceptor fluorophore pairs and instrumentation, such as the LIGHTCYCLERTM ~~LightCycler~~, with a special combination of excitation filter for the donor fluorophore and emission filter for the acceptor fluorophore. This method is not directly applicable in, for example, fluorescence in situ hybridization assays using standard fluorescence microscope filter sets.